REMARKS

By this response, new claims 22-35 have been added, leaving claims 1-35 pending in the application. Reconsideration and reexamination are respectfully requested in view of the following remarks.

First Rejection

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,543,450 to Takita et al. ("Takita"). The rejection is respectfully traversed.

Independent claim 1 is directed to a composition for enhancing the arc-tracking and arc-erosion resistance properties of an article. The claimed composition consists essentially of an "effective amount" of a mixture A, B or C, and a polyorganosiloxane composition D. In Mixture A, constituent A1 is platinum in the form of a platinum complex or compound, and constituent A3 consists of a combination of FeO and Fe_2O_3. Mixture B consists of at least one of: A1 and constituent B2, which comprises cerium (IV) oxide and/or hydroxide; and A1 and constituent B3, which is a combination of cerium (IV) oxide and/or hydroxide and titanium oxide TiO_2. Mixture C contains A1 and constituent C2, which consists of a combination of cerium (IV) oxide and/or hydroxide and titanium oxide TiO_2 and a combination of FeO and Fe_2O_3. Applicants respectfully submit that Takita fails to suggest the combination of features recited in claim 1.

Takita discloses nonflammable silicon rubber compositions containing a platinum compound, a metal element or compound and a specific azo compound. See, for example, column 2, lines 15-44, of Takita. According to Takita, the combination of the metal element or compound and the specific azo compound provides the desired nonflammability properties to the silicon rubber compositions. Takita does not instead suggest a composition that does not contain such combination, necessarily also including the azo compound.

Applicants submit that it is known in the art that such azo compounds are "active" compounds that decompose to produce free radicals upon heating or irradiation, and that such free radicals can interfere with cross-linking reactions. As such, Applicants further submit that the presence of such azo compound in the claimed composition could change the "basic and novel characteristics" of the composition. Thus, such azo compound is excluded from the claimed composition.

Moreover, Takita does not suggest the claimed composition containing an "effective amount" of mixture A, B or C, as these mixtures are defined in claim 1. In contrast, Takita's compositions contain some amount of a combination of a metal or metal compound and a required azo compound in order to achieve the desired properties of the compositions. See, for example, column 2, lines 52-54, of Takita. Takita does not suggest that such nonflammability properties can be achieved by an effective amount of any one of the mixtures A, B or C, as defined in claim 1, but rather clearly discloses that an azo compound must also be included in the composition.

Takita also fails to suggest any one of the mixtures A, B and C, as recited in claim 1. Mixture A contains a combination of FeO and Fe_2O_3. In contrast, Takita discloses using either Fe_3O_4 or Fe_2O_3 individually (see Table 1 at column 6), and thus does not suggest mixture A. Mixture B consists of at least one of: A1 and constituent B2, which comprises cerium (IV) oxide and/or hydroxide; and A1 and constituent B3, which is a combination of cerium (IV) oxide and/or hydroxide and titanium oxide TiO_2. Takita also fails to suggest mixture B. Mixture C contains A1 and constituent C2, which consists of a combination of cerium (IV) oxide and/or hydroxide and titanium oxide TiO_2 and a combination of FeO and Fe_2O_3. Takita also fails to suggest mixture C.

Accordingly, Applicants respectfully submit that claim 1, and thus also each of the claims dependent therefrom, would not have been rendered obvious by Takita.

Applicants further submit that the combinations of features recited in independent claims 16, 18 and 20, and thus also in each of the claims dependent therefrom, are also patentable over Takita for at least the same reasons as those discussed above with respect to claim 1.

Therefore, withdrawal of the rejection is respectfully requested.

Second Rejection

Claims 1-21 stand rejected under 35 U.S.C. § 103(a) over JP 50-97644 ("JP '644") in view of U.S. Patent No. 4,110,300 to Matsushita. The rejection is respectfully traversed.

JP '644 discloses a self-extinguishing silicone rubber composition. The composition comprises diorganopolysiloxane rubber, reinforcing filler silica, organic peroxide, platinum compound and iron oxide.

Matsushita discloses organopolysiloxane rubber, finely powdered silica, platinum and finely powdered γ-type iron sesquioxide.

The composition recited in claim 1 can be used to enhance the arc-tracking and arc-erosion resistance properties of an article. As shown in Table 1 at page 27 of the specification, control composition 1, which did not contain mixture A, B or C, exhibited a high arc-induced weight loss. However, as shown by the results given for Examples 1 and 2, adding a combination of FeO and Fe_2O_3 significantly reduced such weight loss. In addition, the compositions of Examples 1 and 2 exhibited improved flame resistance as compared to control composition 1.

In contrast, neither JP '644 nor Matsushita suggests that both flame resistance and arc-tracking and arc-erosion resistance properties of an article can be enhanced by a composition consisting essentially of an effective amount of mixture A, B or C, and the composition D, as claimed. Neither of these references provides any suggestion that improving the flame resistance of its particular

disclosed compositions also results in an improvement in the arc-tracking and arc-erosion resistance properties of those same compositions, much less a significant improvement in the latter properties. As such, Applicants submit that one skilled in the art would not have looked to either of these references in attempting to solve the problems identified and solved by the claimed composition, because these references provide no guidance regarding these problems.

Accordingly, it is respectfully submitted that claims 1-21 are also patentable over the combination of JP '644 and Matsushita. Therefore, withdrawal of the rejection is respectfully requested.

New Claims

Claims 22-25 depend from claims 1, 16, 18 and 20, respectively, and recite that the composition contains an effective amount of mixture A. As explained above, Takita, for example, does not suggest the claimed composition containing mixture A.

Claim 26 depends from claim 1 and recites that the composition contains mixture B or mixture C. JP '644 and Matsushita, for example, fail to suggest the claimed composition containing mixture B or mixture C.

Support for the subject matter recited in claim 27 is provided in Tables 1 and 2 of the specification. In contrast, compare, for example, the results shown in Table 1, at columns 5-6 of Matsushita.

Support for the subject matter recited in claims 28-32 is provided at pages 22-26 of the specification. See also the test results shown in Table 1 at page 27 of the specification.

Lastly, support for the subject matter recited in claims 33-35 is provided in Example 3, at pages 31-33 of the specification. See also the test results shown in Table 2 at page 34 of the specification.

Applicants respectfully submit that claims 22-35 are also patentable.

Conclusion

For the foregoing reasons, allowance of the application is respectfully requested. Should the Examiner have any questions regarding this response or the application in general, Applicants' undersigned representative can be reached at the telephone number given below.

Respectfully submitted,

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